

FIGURE 1

| 1 | 51 | 100 |
|-----|--|-----|
| N24 | ---y---r---e---q---e---v---t---h--- | --- |
| N27 | ---y---r---e---q---e---v---t---h--- | --- |
| N26 | ---y---r---e---q---e---v---t---h--- | --- |
| N15 | ---y---r---e---q---e---v---t---h--- | --- |
| N17 | ---y---r---e---q---e---v---t---h--- | --- |
| N23 | ---y---r---e---q---e---v---t---h--- | --- |
| N29 | ---y---r---e---n---h---t---h--- | --- |
| N13 | ---y---t---e---e---q---s---h--- | --- |
| N22 | ---ty---r---q---e---n---h---a---p---t---h--- | --- |
| T39 | ---a---kk---h---a---a---a---h--- | --- |
| T44 | ---a---kk---q---a---a---a---h--- | --- |
| T43 | ---a---kk---q---a---a---a---h--- | --- |
| T37 | ---e---a---kk---v---a---a---h--- | --- |
| T40 | ---t---a---kk---v---a---a---h--- | --- |
| T35 | ---a---i---f---kk---n---vt---p---g---y---a--- | --- |
| T4 | ---a---t---s---g---c---v---s---a---v---r--- | --- |
| T3 | ---a---kk---ta---g---k---av---s---ga---gv---r---hp--- | --- |
| T38 | ---a---n---kk---v---q---ta---g---q---dia---s---da--- | --- |
| T42 | ---a---kk---n---r---a---a---r--- | --- |
| Con | MEPQAMIV WQVDRMURU WSLAKHMY VSKAR-WFY RHVESHEK VSSBHIPLG DARLETTYW GLH-GERDAH LQGVNSIBAR KRYSIQVDP | |
| 101 | 151 | 194 |
| N24 | ---h---r---s---i---a---a---a--- | --- |
| N27 | ---h---r---s---i---a---a---a--- | --- |
| N26 | ---h---r---s---i---a---a---a--- | --- |
| N15 | ---h---r---s---i---a---a---a--- | --- |
| N17 | ---h---r---s---i---a---a---a--- | --- |
| N23 | ---h---r---s---i---a---a---a--- | --- |
| N29 | ---h---r---s---i---a---a---a--- | --- |
| N13 | ---h---r---s---i---a---a---a--- | --- |
| N22 | ---h---r---s---i---a---a---a--- | --- |
| T39 | --- | --- |
| T44 | --- | --- |
| T43 | ---g--- | --- |
| T37 | --- | --- |
| T40 | ---t--- | --- |
| T35 | --- | --- |
| T4 | --- | --- |
| T3 | ---v--- | --- |
| T38 | --- | --- |
| T42 | --- | --- |
| Con | DLADLIHLY YEDFESSAI RVALGRVS PRCEYQAGN KVSQIYAL AALTEKCK PLPSVRULT EDRAWPKKT KGRGS-HIM NGH | --- |

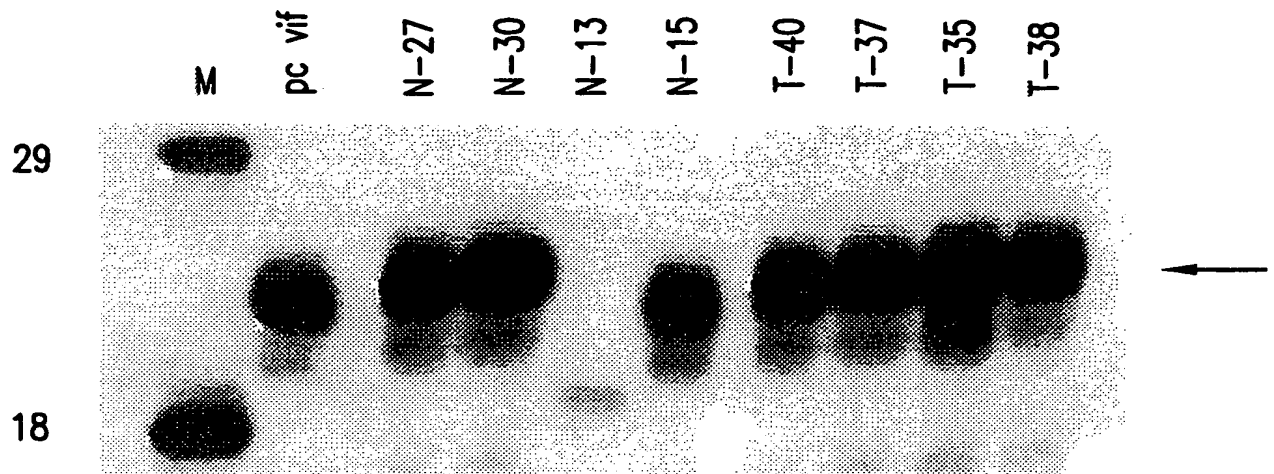


FIG.2

FIGURE 3B

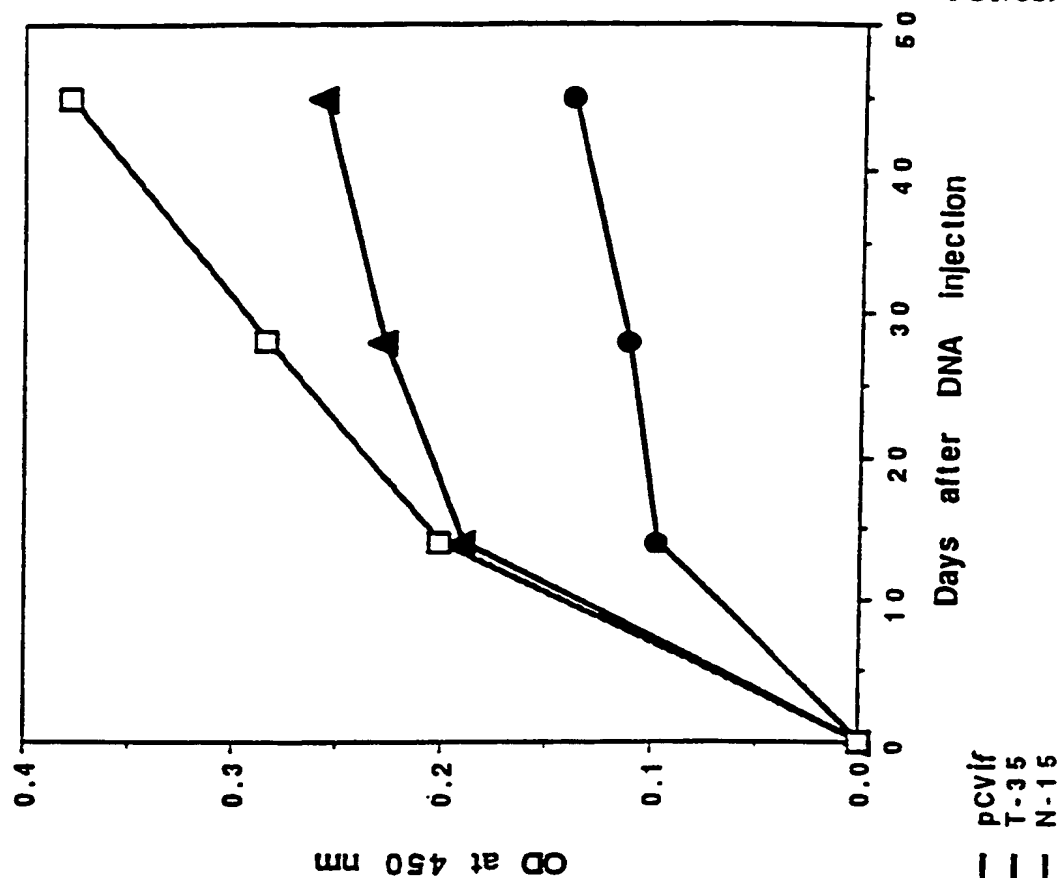
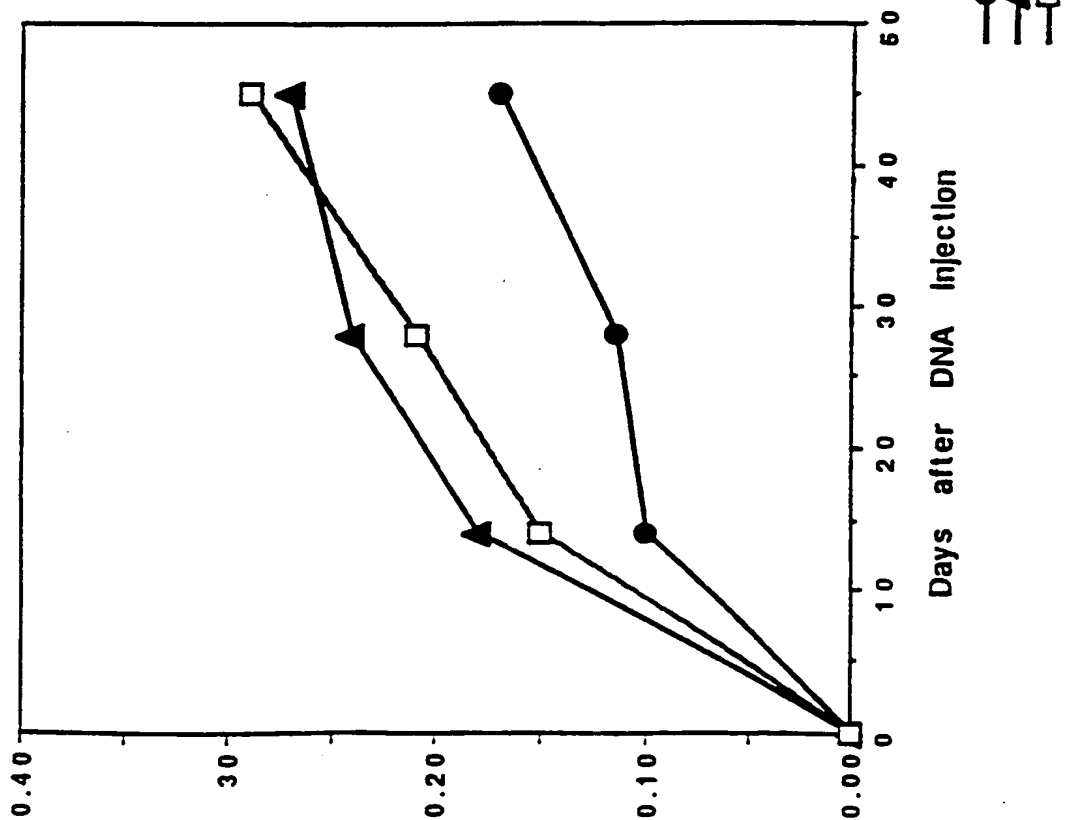


FIGURE 3A



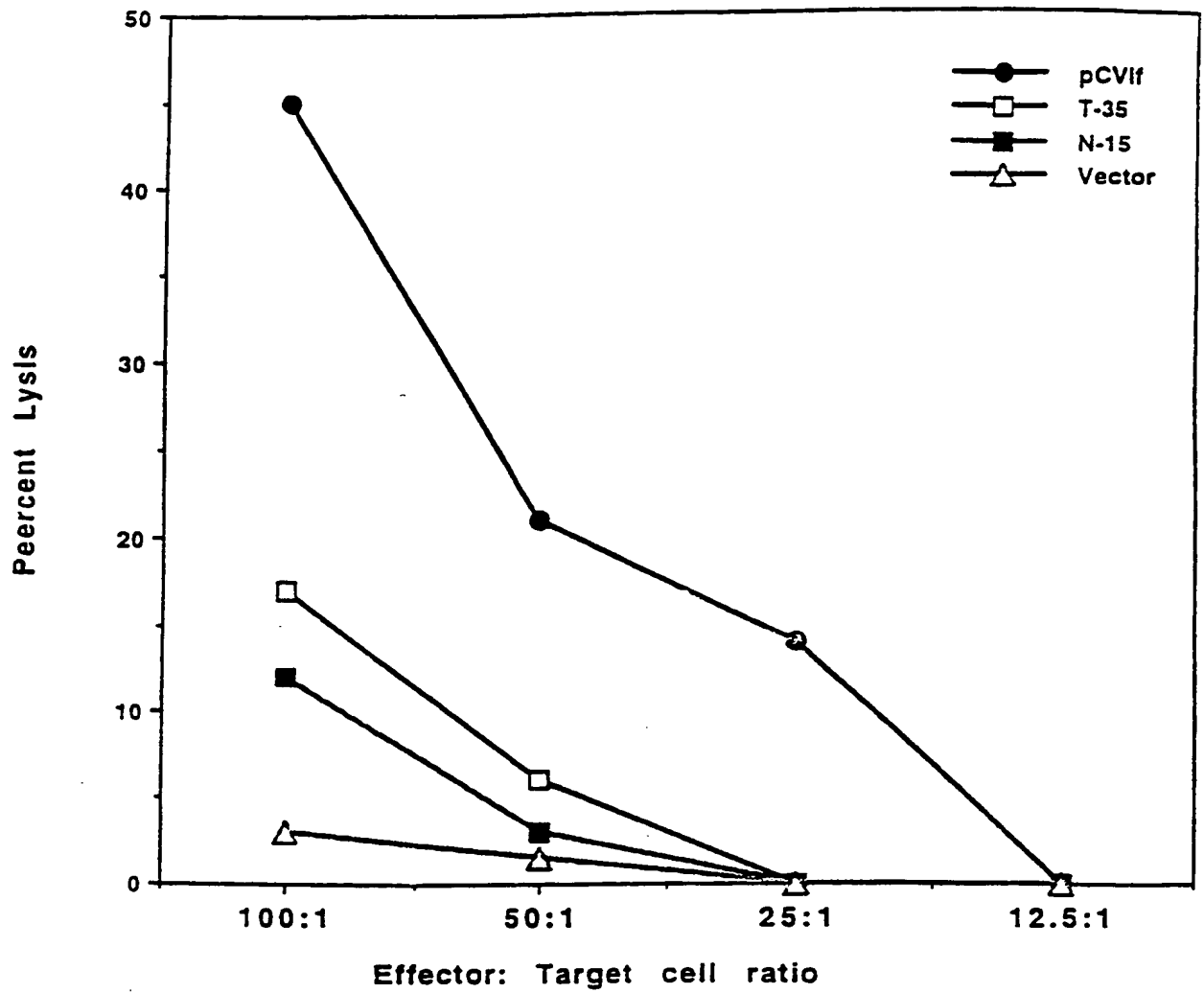


FIGURE 4

WO 99/13896

PCT/US98/19478

FIGURE 5B

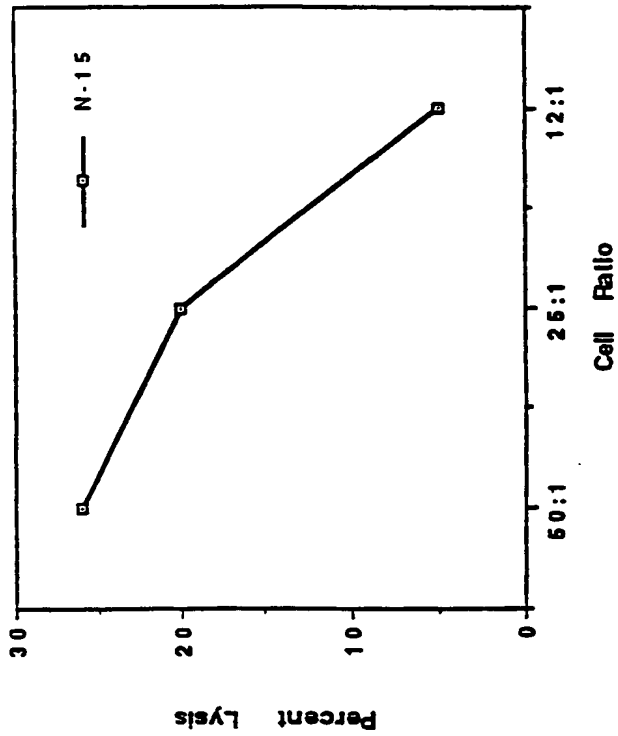


FIGURE 5D

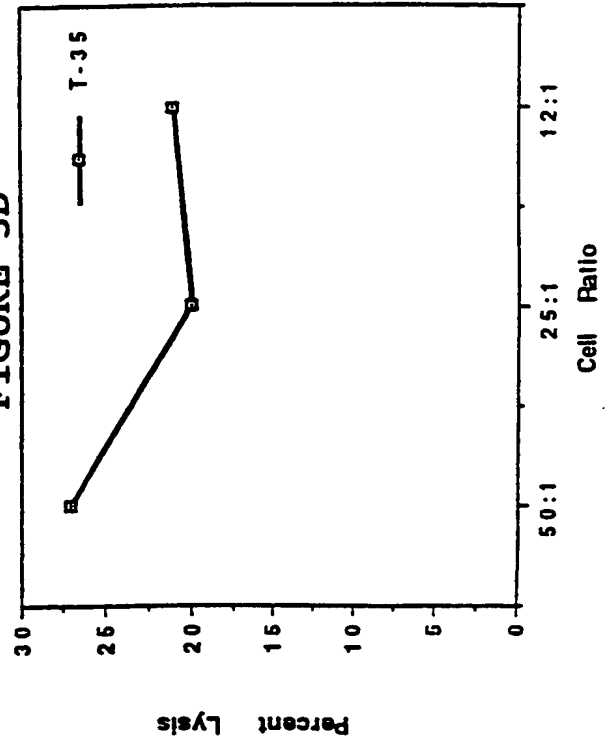


FIGURE 5A

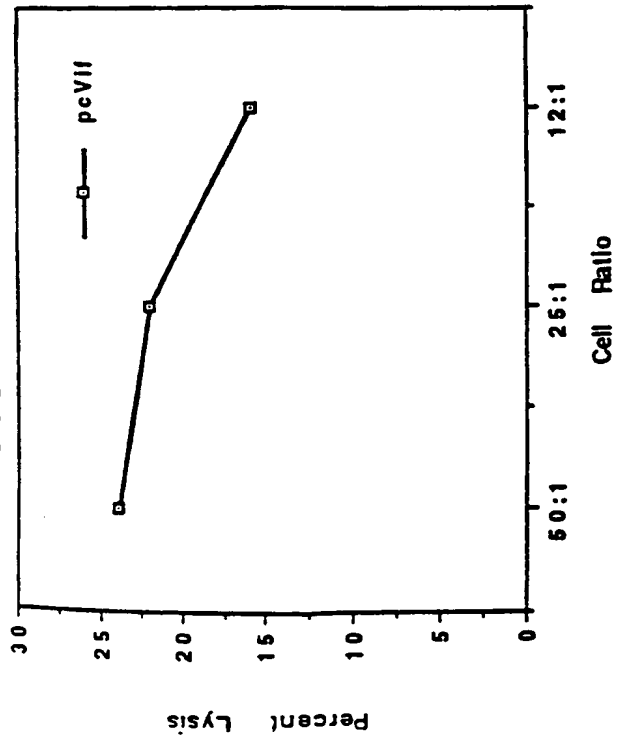
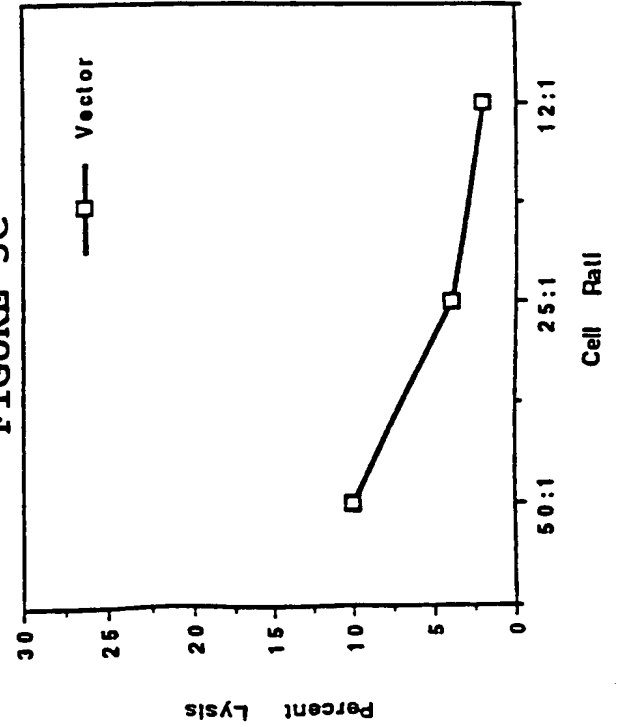


FIGURE 5C



T-cell proliferation

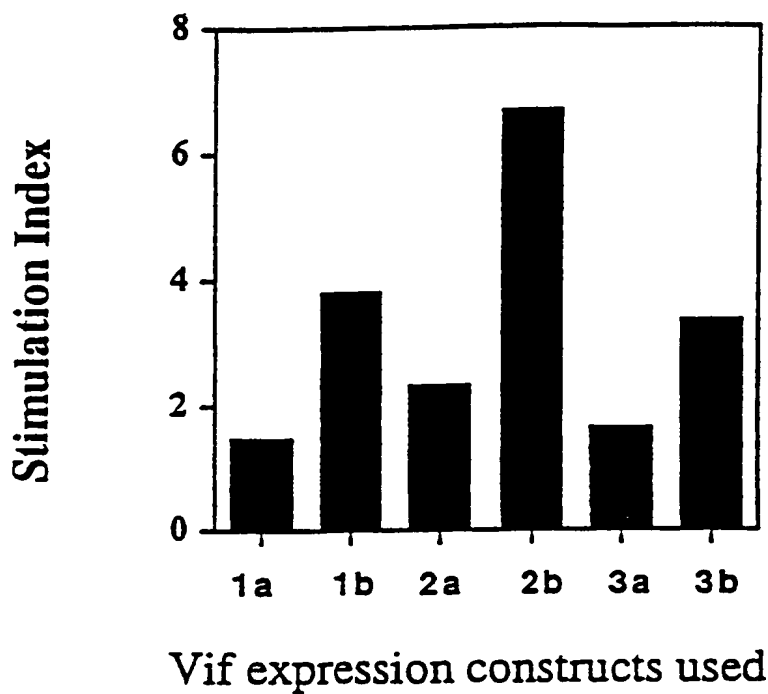


FIGURE 6

FIGURE 7A

1. Vif-N13.pap

MENRWQVIIV WQVDRMRIPT WNSLVKYHMY *SKKAREWIFY *HHYQSPHPK
VSSEVHIPLE DARLEITSEFW GLHTIGERDWH LGQGVSTIEWR KRRYSTHVDP
DLADQLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
AALITPKKIK PPLASVRKLT EDWANKPQKT KGHGSHIMN GH*

2. Vif-N15.pap

MENRWQVMIV WQVDRMRIPT WNSLVKYHMY RSKKAREWIFY RHHYQSPHPR
VSSEVHIPLE DARLEITTYW GLHTIGERDWH LGQGVSTIEWR KRRYSTQVDP
DLADQLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

3. Vif-N17.pap

MENRWQVMIV WQVDRMRIPT WNSLVKYHMY RSKKAREWIFY RHHYQSPHPK
VSSEVHIPLE DARLEITTYW GLHTIGERDWH LGQGVSTIEWR KRRYSTQVDP
DLADQLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

FIGURE 7B

4. Vif-N22.pap

MENRWQVMIV WQVDRMRIRT WNSLVTYHMY RSQKAREWFN RHHYHSPHPK
 VSSEVHIPLE DARLAIPTFW GLHTGERDWH LGQGVSTIWR KRRYSTQVDP
 DLADQLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
 AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

5. Vif-N24.Pep

MENRWQVMIV WQVDRMRIRT WNSLVKYHMY RSKKAREWFF RHHYQSPHPK
 VSSEVHIPLE DARLVITTYW GLHTGERDWH LGQGVSTIWR KRRYSTHVDP
 DLADQLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
 AALITPKKIK PPLASVRKLT EDWANKPQKT KGHGSHIMN GH*

6. Vif-N26.pap

MENRWQVMIV WQVDRMRIRT WNSLVKYHMY RSKKAREWFF RHHYQSPHPK
 VSSEVHIPLE DARLVITTYW GLHTGERDWH LGQGVSTIWR KRRYSTQVDP
 DLADHLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
 AALITPKKIK PPLASVRKLT EDWANKPQKT KGHGSHIMN GH*

7. Vif-N27.pap

MENRWQVMIV WQVDRMRIRT WNSLVKYHMY RSKKAREWFF RHHYQSPHPK
 VSSEVHIPLE DARLVITTFW GLHTGERDWH LGQGVSTIWR KRRYSTHVDP
 DLADQLIHLY YFDCFSESAT RKAILGHRVS PRCEYRAGHS KVGSLQYLAI

FIGURE 7C

AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

8. Vif-N29.pap

MENRWQVMIV WQVDRMRIRT WNSLVKYHMY RSKKAREWFN RHHYHRPHPK
 VSSEVHIPLD DARLEITTFW GLHTGERDWH LGQGVSTIWR KRRYSTQVDP
 DLADQLIHLY YFDCFSESAL RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
 AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

9. Vif-N30.

MENRWQVMIV WQVDRMRIRT WNSLVKYHMY RSQKEREFN RHHYHSPHPE
 QSSTAHIPLV DGRLEKIAWW SLDTGEQVWH RGHVSTIWR KRRYSTQVDP
 DLVDQLIHLY YFDCFSESAL RKAILGHRVS PRCEYRAGHS KVGSLQYLAI
 AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

Vif-T3.pap

MENRWQVMIV WQVDRMRIRT WNSLVKHMY VSKKAKKWFY RHHYESPHPK
 VSSTAHIPLG DGRLEKTAVW SLQAGDQVWH RGHVSTIWR KRRYSTQVDP
 DLVDQLIHLY YFDCFSESAL RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
 AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

Vif-T35.pap

FIGURE 7D

MENRWQVMIV WQVDRMRIRA WNSLVKHHIY FSKKAKKWFY RHHYESPHEP
 VSSEVHIPLG DARLVITTPYW GLHGGERDWH LAQGVSTIEWR KRRYSTQVDP
 DLADQLIHLY YFDCFSESAI RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
 AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

Vif-T37.pap

MENRWEVMIV WEVDRMRIRA WNSLVKHHMY VSKKAKKWFY RHHYESPHEK
 VSSEVHIPLG DARLVITTPYW GLHAGERDWH LGQGVSTIEWR KRRYSTQVDP
 DLADQLIHLY YFDCFSESAI RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
 AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

Vif-T38.pap

MENRWQVMIV WQVDRMRIRA WNSLVKHHMY VSKNAKKWFY RHHYDSPHEV
 QSSTAHIPLG DGRLOKIAFW SLDAGERDWH LGQGVSTIEWR KRRYSTQVDP
 DLADQLIHLY YFDCFSESAI RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
 AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

Vif-T39.pap

MENRWQVMIV WQVDRMRIRA WNSLVKHHMY VSKKAKKWFY RHHYDSPHEK
 VSSEVHIPLG DARLEITTPYW GLHAGERDWH LGQGVSTIEWR KRRYSTHVDP

FIGURE 7E

DLADQLIHLY YFDCFSESAL RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

Vif-T4.pep

MENRWQVMIV WQVDRMRIRA WNSLVKHHMY VSKKARIWFS RHHYGSPHPK
VCSEVHIPLG DARLVITTYW SLHAGE*DAH VGQRVSTEWK KRRYSTQVDP
DLADQLIHLY YFDCFSESAL RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

Vif-T40.pep

MENRWQVMIV WQVDRMITRA WNSLVKHHMY VSKKAKKWFY RHHYESPHPK
VSSEVHIPLG DARLVITTYW GLHAGERDWH LGQGVSTEWK KRRYSTQVDP
DLADQLIHLY YFDCFSESAL RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
AALITPKKIK PPLPSVRKLT EDRWNPQKT KGHGSHIMN GH*

Vif-T42.pep

MENRWQVMIV WQVDRMRIRA WNSLVKHHMY VSKKAKKWFN RHHYDRPHPK
VSSEVHIPLG DARLEITTFW GLHAGERDWH LGQGVSTEWK KRRYSTQVDP
DLADQLIHLY YFDCFSESAL RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
AALITPKKIK PPLPSVRKLT EDRWNPQKT KGTEGAIQ*

FIGURE 7F

Vif-T43.pap

MENRWQVMIV WQVDRMRIRA WNSLVKHMF VSKKAKKWFY RHHYESPHPK
VSSEVHIPLG DARLEITTFW GLHAGERDWH LGQGVSTEW KRRYSTQVDP
DLADQLIHLY YFGCFSESAT RKAILGYRVS PRCEYQAGHN KVGSLQYLGL
AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

Vif-T44.pap

MENRWQVMIV WQVDRMRIRA WNSLVKHMY VSKKAKKWFY RHHYESPHQ
VSSEVHIPLG DARLEITTYW GLHAGERDWH LGQGVSTEW KRRYSTQVDP
DLADQLIHLY YFDCFSESAT RKAILGYRVS PRCEYQAGHN KVGSLQYLAL
AALITPKKIK PPLPSVRKLT EDWANKPQKT KGHGSHIMN GH*

FIGURE 8A

N13 (SEQ ID NO:27)

ATGGAAAACAGATGGCAGGTGATTATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATTGATCAAAGAAAGCTAGGGAATGGTTTTAT
TGACATCACTATCAAAGTCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGAG
GATGCTAGATTGGAAATAACATCATTGTTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTTCAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACACGTCGACCCT
GATCTAGCAGACCACTAATTCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTAAATAACACCAAAAAAGATAAAG
CCACCTTTGGCGAGTGTTCAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N15 (SEQ ID NO:28)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTTAT
AGACATCACTATCAAAGTCCTCATCCAAGAGTAAGTTCAGAAGTACACATCCCCTAGAG
GATGCTAGATTGGAAATAACAACATATTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTTCAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GATCTAGCAGACCACTAATTCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTAAATAACACCAAAAAAGATAAAG
CCACCTTTGCCGAGTGTTCAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N17 (SEQ ID NO:29)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTTAT
AGACATCACTATCAAAGTCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGAG
GATGCTAGATTGGAAATAACAACATATTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTTCAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GATCTAGCAGACCACTAATTCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTAAATAACACCAAAAAAGATAAAG
CCACCTTTGCCGAGTGTTCAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N22 (SEQ ID NO:30)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAACATACCATATGTATAGATCACAGAAAGCTAGGGAATGGTTTAAT
AGACATCACTATCACAGTCCTCATCCAAAAGTAAGTTCAGAAGTCCACATCCCCTAGAG
GATGCTAGATTGGCAATACCAACATTTTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTTCAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GATCTAGCAGACCACTAATTCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTAAATAACACCAAAAAAGATAAAG
CCACCTTTGCCGAGTGTTCAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

FIGURE 8B

N23 (SEQ ID NO:31)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTTAT
AGACATCACTATCAAAGTCCTCATCCAAAAGTAAGTTCAGAAGTCCACATCCCCTAGAG
GATGCTAGATTGGAAATAACAACATATTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTGAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACACGTCGACCCT
GATCTCGCAGACCACCTAATTCATCTGTGTTATTTTGATTGTCTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTATAACACCAAAAAAGATAAAG
CCACCTTTGCCGAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N24 (SEQ ID NO:32)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTTAT
AGACATCACTATCAAAGTCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGAG
GATGCTAGATTGGTAATAACAACATATTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTGAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACACGTCAGACCCT
GATCTAGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTATAACACCAAAAAAGATAAAG
CCACCTTTGGCGAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N26 (SEQ ID NO:33)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTTAT
AGACATCACTATCAAAGTCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGAG
GATGCTAGATTGGTAATAACAACATATTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTGAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GATCTAGCAGACCACCTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTATAACACCAAAAAAGATAAAG
CCACCTTTGGCGAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N27 (SEQ ID NO:34)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTTGTAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTTAT
AGACATCACTATCAAAGTCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGAG
GATGCTAGATTGGTAATAACAACATTTTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGTGAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACACGTCAGACCCT
GATCTAGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTATAACACCAAAAAAGATAAAG
CCACCTTTGCCGAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGTCACAGAGGGAGCCATACAATGAATGGACACTAG

FIGURE 8C

N29 (SEQ ID NO:35)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTT TAGTAAAATACCATATGTATAGATCAAAGAAAGCTAGGGAATGGTTTAAT
AGACATCACTATCACCGTCCTCATCCAAAAGTAAGTTCAGAAGTCCACATCCCCTAGAG
GATGCTAGATTGGAAATAACAACATTTTGGGGTCTGCATACAGGAGAAAGAGACTGGCAT
TTGGGT CAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GATCTAGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGACATAGC
AAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTAAATAACACCAAAAAAGATAAAG
CCACCTTTGCCGAGTGT CAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

N30 (SEQ ID NO:36)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAGGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTT TAGTAAAATACCATATGTATTGATCAAAGAAAAGAAAGAAAGGGAATGGT
TTTATAGACATCACTATCACAGCCCTCATCCAGAACAAGTTCAACAGCCCACATCCCCTGC
TAGTGGATGGTAGATTGGAAAAATAGCAGTTTGGAGTCTGGATACAGGAGATGGCGTCT
GGCAGAGGGGGCATCGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAG
ACCCTGATCTAGTAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTG
CTATAAGAAAAGCCATATTAGGACACAGAGTTAGTCCTAGGTGTGAATATCGAGCAGGAC
ATAGCAAGGTAGGATCACTACAGTACTTGGCAATAGCAGCATTAAATAACACCAAAAAAGA
TAAAGCCACCTTTGCCGAGTGT CAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGA
AGACCAAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T3 (SEQ ID NO:37)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAACA
TGGAACAGTTT TAGTAAAACACCATATGTATGTTTCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGAAAGCCCTCATCCAAAAGTAAGTTCACAGCCCACATCCCCTAGGG
GATGGTAGATTGGAGAAAACAGCAGTTTGGAGTCTGCAGGCAGGAGATGGAGTCTGGCAC
AGGGGGCATCCAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GATTTGGTAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGT TAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T4 (SEQ ID NO:38)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTT TAGTAAAACACCATATGTATGTTTCAAAGAAAGCTAGGACATGGTTTTCT
AGACATCACTATGGAAGCCCTCATCCAAAAGTATGTT CAGAAGTACACATCCCCTAGGG
GATGCTAGATTGGTGATAACAACATATTGGAGTCTGCATGCAGGAGAAATGAGACTGGCAT
TTGGGT CAGAGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACTTGGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGT GAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

FIGURE 8D

T35 (SEQ ID NO:39)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAAACACCATATTTATTTTCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGAAAGCCCTCATCCAAACGTAAGTTCAGAAGTACACATCCCCTAGGG
GATGCTAGATTGGTGACAACACCATATTGGGGTCTGCATGGAGGAGAAAGAGACTGGTAT
CTGGCTCAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACCTGGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T37 (SEQ ID NO:40)

ATGGAAAACAGATGGGAGGTGATGATTGTGTGGGAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAAACACCATATGTATGTTTTCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGAAAGCCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGGG
GATGCTAGATTGGTGATAACAACATATTGGGGTCTGCATGCAGGAGAAAGAGACTGGCAT
TTGGGTCTAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACCTGGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T38 (SEQ ID NO:41)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAAACACCATATGTATGTTTTCAAAGAACGCTAAGAAATGGTTTTAT
CGACATCACTATGACAGCCCTCATCCAGTCCAAAGTTCAACAGCCCATCCCGCTAGGG
GATGGTAGATTGCAGAAAATAGCATTTTGGAGTCTGGATGCAGGAGAAAGAGACTGGCAT
TTGGGTCTAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACCTGGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGGCATACAATGAATGGACACTAG

T39 (SEQ ID NO:42)

ATGGAAAACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAAACACCATATGTATGTTTTCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGACAGCCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCCTAGGG
GATGCTAGATTGGAGATAACAACATATTGGGGTCTGCATGCAGGAGAAAGAGACTGGCAT
TTGGGTCTAGGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACACGTAGACCCT
GACCTGGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

FIGURE 8E

T40 (SEQ ID NO:43)

ATGGAACACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGACGATTAGAGCA
TGGAACAGTTTGTAGTAAACACCATATGTATGTTTCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGAAAGCCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCACTAGGG
GATGCTAGATTGGTGATAACAACATATTGGGGTCTGCATGCAGGAGAAAGAGACTGGCAT
TTGGGTGAGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACTTGGCAGACCAACTAACTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T42 (SEQ ID NO:44)

ATGGAACACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAACACCATATGTATGTTTCAAAGAAAGCTAAGAAATGGTTTAT
AGACATCACTATGACCGCCCTCATCCAAAAGTAAGTTCAGAAGTCCACATCCCACTAGGG
GATGCTAGATTGGAGATAACAACATTTTGGGGTCTGCATGCAGGAGAAAGAGACTGGCAT
TTGGGTGAGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACTTGGCAGACCAACTAACTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T43 (SEQ ID NO:45)

ATGGAACACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAACACCATATGTTTGTTCCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGAAAGCCCTCATCCAAAAGTAAGTTCAGAAGTACACATCCCACTAGGG
GATGCTAGATTGGAGATAACAACATTTTGGGGTCTGCATGCAGGAGAAAGAGACTGGCAT
TTGGGTGAGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACCTGGCAGACCAACTAATTCATCTGTATTATTTTGGTTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG

T44 (SEQ ID NO:46)

ATGGAACACAGATGGCAGGTGATGATTGTGTGGCAAGTAGACAGGATGAGGATTAGAGCA
TGGAACAGTTTGTAGTAAACACCATATGTATGTTTCAAAGAAAGCTAAGAAATGGTTTTAT
AGACATCACTATGAAAGCCCTCATCCACAAGTAAGTTCAGAAGTACACATCCCACTAGGG
GATGCTAGATTGGAGATAACAACATATTGGGGTCTGCATGCAGGAGAAAGAGACTGGCAT
TTGGGTGAGGAGTCTCCATAGAATGGAGGAAAAGGAGATATAGCACACAAGTAGACCCT
GACCTGGCAGACCAACTAATTCATCTGTATTATTTTGATTGTTTTTCAGAATCTGCTATA
AGAAAAGCCATATTAGGATATAGAGTTAGTCCTAGGTGTGAATACCAAGCAGGACATAAT
AAGGTAGGATCTCTACAGTACTTGGCACTAGCAGCATTAAATAACACCAAAGAAGATAAAG
CCACCTTTGCCTAGTGTGAGGAACTGACAGAGGATAGATGGAACAAGCCCCAGAAGACC
AAGGGCCACAGAGGGAGCCATACAATGAATGGACACTAG